

REMARKS

Applicants canceled claims 3, 6, 14, 15, 25, and 28 without prejudice or disclaimer. Applicants added new claims 34-45. Those new claims do not add new matter and are supported by the specification as noted below. Applicants respectfully request this Amendment After Final be entered by the Examiner under 37 C.F.R. § 1.116 in order to place this application in better condition for allowance.

Information Disclosure Statement

Applicants respectfully request the Examiner to initial and return a copy of the submitted PTO-1449 Form filed with the Information Disclosure Statement on March 24, 2003.

Rejection Under 35 U.S.C. § 112, ¶ 1

The Examiner rejected claims 3, 6, 14, 15, 25, and 28 under 35 U.S.C. § 112, ¶ 1, for allegedly lacking enablement. (Paper No. 16 at page 2). Applicants respectfully traverse the rejection for the reasons presented to date. Solely to expedite prosecution and in now way acquiescing to the rejection, those rejected claims have been canceled in this Amendment.

Applicants respectfully submit that new claims 34-45 are enabled by Applicants' specification. Those new claims are directed to a computer-implemented method, a system, and a computer-readable medium for processing a signal. Based on at least the exemplary code on pages 16-17, the specification provides at least one example for processing a signal. Therefore, the claims directed to processing a signal are enabled

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by Applicants' specification. Moreover, further support for new claims 34-48 can be found, e.g., on page 13, line 1, to page 16, line 3, and in Figure 3A.

Rejection Under 35 U.S.C. § 102(b)

The Examiner rejected claims 3, 6, 14, 15, 25, and 28 as allegedly being anticipated by U.S. Patent No. 5,580,728 to Perlin ("Perlin"). (Paper No. 16 at page 4). Applicants respectfully traverse the rejection for the reasons presented to date. Solely to expedite prosecution and in now way acquiescing to the rejection, those rejected claims have been canceled in this Amendment.

Applicants respectfully submit that new claims 34-45 are not anticipated by Perlin. New independent claims 34, 38, and 42 recite, *inter alia*, "analyzing the signal to determine if the signal meets a threshold test of an allele caller making a correct call" or "analyze the signal to determine if the signal meets a threshold test of an allele caller making a correct call." Claims 34, 38, and 42 further recite, *inter alia*, "making an allele call for the signal if the threshold test is met" and "make an allele call for the signal if the threshold test is met."

Perlin discusses a method for genotyping using a linear time-to-size interpolation. (Perlin, Col. 8, ll. 24-38). Specifically, Perlin discusses that the method uses a linear time-to-size interpolation to convert the time of each peak apex's occurrence to a DNA size estimate. (Perlin, Col. 12, ll. 53-56). Perlin defines an "apex" as the point of change between a monotonically increasing series and a monotonically decreasing series, left to right. (Perlin, Col. 12, ll. 48-51). Hence, Perlin makes an allele call irrespective if a signal meets a threshold test of an allele caller making a correct call.

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Thus, in contrast, Perlin fails to teach performing an analysis to determine if the signal meets a threshold test of an allele caller making a correct call, as recited in claims 34, 38, and 42. In further contrast, Perlin fails to teach making an allele call for the signal if the threshold test is met, as recited in claims 34, 38, and 42.

Claims 35-37, 39-41, and 43-45 ultimately depend from claims 34, 38, and 42 respectively. Because Perlin fails to teach each and every element of claims 34, 38, and 42, as discussed above, it must also fail to teach each and every element of claims 35-37, 39-41, and 43-45. Thus, Applicants need not respond to Examiner's comments under § 102(b) regarding the elements of those dependent claims. Furthermore, Applicants do not acquiesce in the substantive merits of those comments with respect to Perlin.

Rejection Under 35 U.S.C. § 102(e)

The Examiner rejected claims 3, 6, 14, 15, 25, and 28 as allegedly being anticipated by U.S. Patent No. 6,274,317 to Hiller *et al.* ("Hiller") (Paper 16 at page 4). Applicants respectfully traverse the rejection for the reasons presented to date. Solely to expedite prosecution and in now way acquiescing to the rejection, those rejected claims have been canceled in this Amendment.

Applicants respectfully submit that new claims 34-48 are not anticipated by Hiller. Hiller discusses an automated allele caller system that identifies alleles from a trace. The automated allele caller applies a typical shape of an allele for a marker to the trace to identify potential allele calls that match to the typical shape of the allele at the marker and assigns a quality factor to the allele calls. (Hiller, Abstract, Col. 2, ll. 25-31).

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Specifically, in Figure 6A, Hiller discusses a method for allele calling that retrieves potential calls and matches a pattern of potential calls to a model shape. (Hiller, Figure 6A, Col. 7, ll. 31-42). Hence, like Perlin, Hiller makes an allele call irrespective if a signal meets a threshold test of an allele caller making a correct call.

Thus, in contrast, Hiller fails to teach performing an analysis to determine if the signal meets a threshold test of an allele caller making a correct call, as recited in claims 34, 38, and 42. In further contrast, Perlin fails to teach making an allele call for the signal if the threshold test is met, as recited in claims 34, 38, and 42.

Claims 35-37, 39-41, and 43-45 ultimately depend from claims 34, 38, and 42 respectively. Because Hiller fails to teach each and every element of claims 34, 38, and 42, as discussed above, it must also fail to teach each and every element of claims 35-37, 39-41, and 43-45. Thus, Applicants need not respond to Examiner's comments under § 102(e) regarding the elements of those dependent claims. Furthermore, Applicants do not acquiesce in the substantive merits of those comments with respect to Hiller.

Conclusion

Applicants request the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims. If the Examiner does not agree that the application is in condition for allowance, Applicants request the Examiner to call the undersigned at 650-849-6680 to schedule an interview.

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Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: August 21, 2003

By:


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